# A New Species of Dasyphyllum (Asteraceae-Mutisieae) from Paraguay

Elsa Matilde Zardini

Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166-0299, U.S.A.

Nélida Soria

Facultad de Ciencias Químicas, Universidad Nacional de Asunción, C.C. 3291, Asunción, Paraguay

ABSTRACT. A fourth species of Dasyphyllum sect. Dasyphyllum with a floral tube that is pilose on the outside is described here; the other three species are Dasyphyllum inerme, D. lanceolatum, and D. vepreculatum. This new species, which we name Dasyphyllum maria-lianae, is distinguished from the others by the broadly ovate leaves that are loosely villous above and densely villous below, a longer pedicel, a wider involucre, densely tomentose phyllaries, and a greater number of flowers.

As a result of recent exploratory work in Para-

Frutex scandens usque ca. 5 m altus ramosus, ramis tomentosis spinosis; spinae axillares geminae. Folia alterna; petioli 5–10 mm longi; laminae late ovatae, apice acutae et basi rotundatae, supra laxe villosae et inferne dense villosae, trinervatae, 5–7 cm longae et 3–4 cm latae. Capitula campanulata 10–12 mm alta et lata in paniculis; pedicelli 10–15 mm longi; phyllaria ovata apice mucronata, tomentosa. Flores ca. 28 lutei; corollae pentasectae extus villosae ad tubum et apices segmentorum. Achaenia dense et longe albo-sericea; pappi setae plumosae, albidae.

Climbing shrub to 5 m tall, much branched. Stems tomentose, hanging, with paired axillary spines. Leaves alternate; petiole 5–10 mm long; blade broadly ovate acute at apex and rounded at base, trinervate, loosely villous above and densely villous below,  $5-7 \times 3-4$  cm. Heads in paniculate corymbiform racemes. Pedicel 10–15 mm. Involucre campanulate, 10–12 mm high and wide; phyllaries ovate mucronate at apex, tomentose. Flowers ca. 28; corolla yellow, 10–12 mm long, pentasect (segments 4–6 mm long) with one incision deeper than the others, with tube and apical parts of segments pilose on outside surface. Achenes cylindrical, 4–5 mm long, dense and long white sericeous; pappus of plumose whitish bristles 12–14 mm long.

guay, a distinctive new species of Dasyphyllum has been collected, which we describe here. This is the fourth species of Dasyphyllum sect. Dasyphyllum = section *Microcephala* (Baker) Cabrera] with the floral tube pilose outside and the first one with that feature recorded for Paraguay. The other three species of Dasyphyllum sect. Dasyphyllum with floral tube pilose on the outside surface are Dasyphyllum inerme (Rusby) Cabrera, D. lanceolatum (Lessing) Cabrera, and D. vepreculatum (D. Don) Cabrera (Cabrera, 1959). Aside from them, this feature is also known in three species of Dasyphyllum sect. Macrocephala, D. lanosum Cabrera, D. fodinarum (Gardner) Cabrera, and D. donianum (Gardner) Cabrera (Cabrera, 1959); this section is distinguished from section Dasyphyllum by the involucre larger than 2 cm high and by the heads solitary or few. With its beautiful hanging twigs covered by pale green leaves and bright yellow flowers, Dasyphyllum maria-lianae is a conspicuous part of the flora in the mountain forests of the Cordillera de Ybytyruzú and the Cerro Naville in eastern Paraguay.

Paratype. PARAGUAY. Guairá: Cordillera de Ybytyruzú, road Melgarejo-Antena, 2 km N of Antena, 25°45'S, 56°15'W, forest, 14 July 1989, Zardini & Velázquez 13263 (FCQ, MO).

Dasyphyllum maria-lianae Zardini & Soria, sp. nov. TYPE: Paraguay. Guairá: Mbocayaity-Melgarejo, Cerro Naville, 25°43'S, 56°21'W, forest on slopes, 6 July 1992, Zardini & Guerrero 32470 (holotype, FCQ; isotype, MO). Figure 1.

#### Novon 4: 80-82. 1994.

The four species of *Dasyphyllum* sect. *Dasyphyllum* with a floral tube pilose on the outside surface can be differentiated as follows:

- 1a. Flowers ca. 28; pedicel 10-15 mm; involucre 10-12 mm wide; phyllaries ovate; mucronate at apex, densely tomentose; leaves broadly ovate, 5-7 × 3-4 cm, loosely villous above and densely villous below; eastern Paraguay .....
- 1b. Flowers fewer than 20; pedicel 2-7 mm; involucre 6-7 mm wide; phyllaries ovate or lanceolate, mucronate or spiny at apex, loosely villous or sericeous; leaves ovate, elliptic or

### Volume 4, Number 1 1994

## Zardini & Soria Dasyphyllum maria-lianae

81

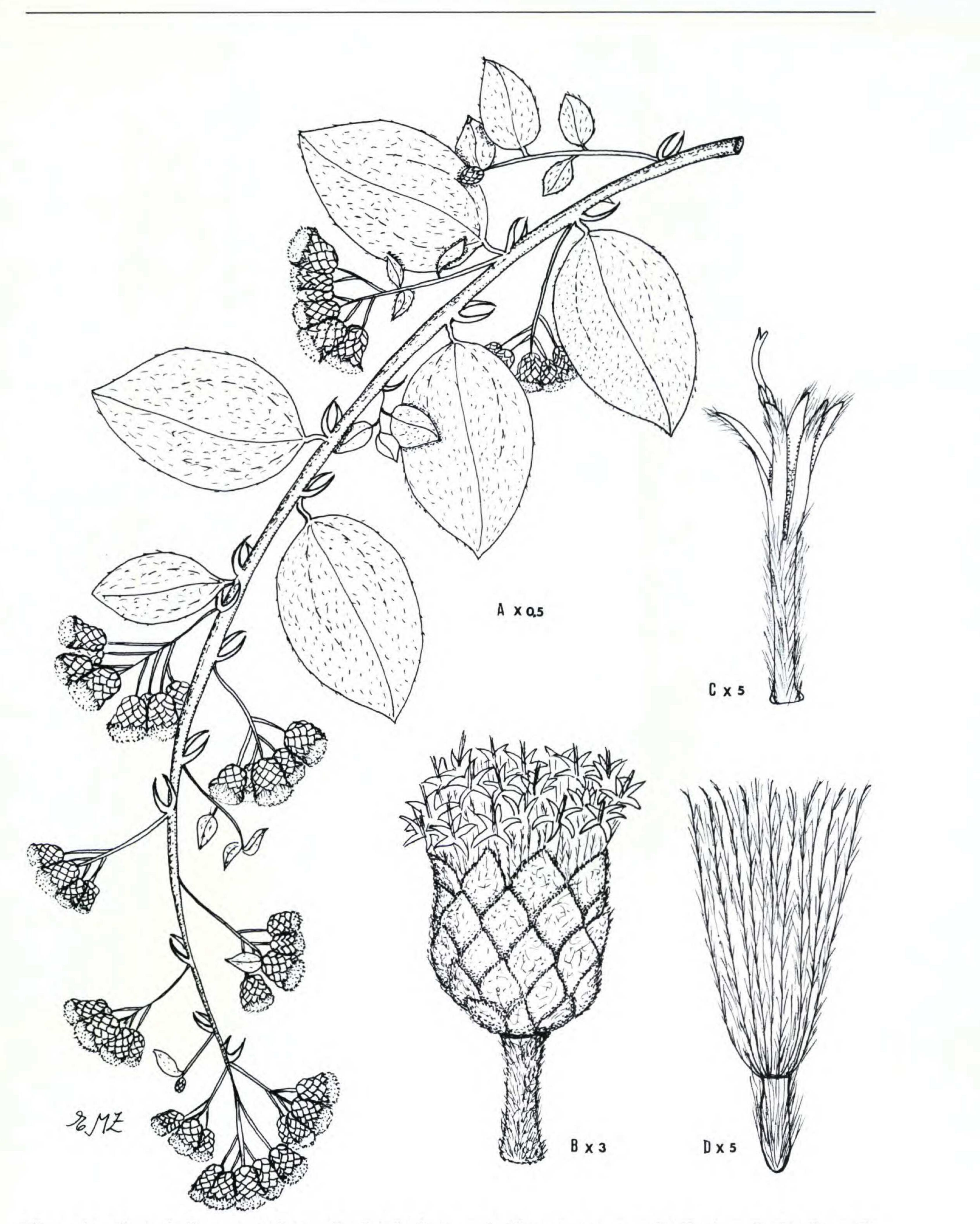


Figure 1. Dasyphyllum maria-lianae Zardini & Soria. -A. Flowering stem. -B. Head. -C. Corolla. -D. Achene.

lanceolate,  $4.5-8 \times 1.5-4$  cm, glabrous above and glabrous or loosely pubescent below.

- 2a. Phyllaries loosely villous, mucronate at apex; southern Bolivia and northwestern Argentina
- 2b. Phyllaries sericeous, with an apical spine
  1-2 mm long.
  - 3a. Leaves elliptic-lanceolate or ovate-lanceolate, loosely villous, 5-8 × 2-4
     cm; involucre 12 mm high; Venezuela and northeastern Brazil

We name this species after María Liana Gentry Zardini, daughter of the senior author.

Acknowledgments. We thank the National Geographic Society for support of fieldwork and an anonymous reviewer for comments on the manuscript.

#### Literature Cited

Cabrera, A. L. 1959. Revisión del género Dasyphyllum

... Dasyphyllum vepreculatum (D. Don) Cabrera

3b. Leaves lanceolate, loosely sericeous,
 4.5 × 1-2 cm; involucre 8-10 mm
 high; southern Brazil .....

... Dasyphyllum lanceolatum (Lessing) Cabrera (Compositae). Rev. Mus. La Plata, Bot. 9: 21-100.

Volume 4, Number 1, pp. 1-82 of NOVON was published on 30 March 1994.